

LEAF LETTUCE CULTIVAR EVALUATION TRIALS - 1996

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The leaf lettuce cultivar evaluation trial was conducted at the OARDC Much Crops Branch near Willard, Ohio. Forty cultivars or promising breeding lines were evaluated in a replicated trial. This evaluation involved the following types of lettuce: Boston, Green leaf, Red leaf, Romaine, Escarole and Endive.

Cultural Information

Transplants were grown in a poly-greenhouse with temperature set at 70° days and 60° nights for four weeks. Plants were raised in Todd planter flats (080A) using Metromix 360 as a growing media. Once the true leaf appeared, plants were fertilized on a continuous basis at the rate of 50 ppm of a Peters 20-10-20 solutin using an Anderson injector system.

The field planting soil was classed as a muck soil, 85% organic matter. Prior to transplanting, early April, 800 lb/A of 17-17-17 was broadcast and incorporated. Transplanting was done using an old Maide three-row Holland transplanter placing the plants 9 inches apart within rows, 20 inches between rows. Plots were 20 feet long. All other cultural practices during the growing season were according to standard recommendations. Weed control was excellent and no serious insect or disease problems developed during the season.

Weather: Environmental factors at each of the research facilities and grower operations

| Willard | Rain long term | | Air Temperature(avg) | | | Long term (avg) | | | Humidity (avg) | | |
|---------|----------------|------|----------------------|------|------|-----------------|------|-----|----------------|------|------|
| | in | avg | min. | max. | avg | min | max | avg | min | max | avg |
| April | 3.34 | 3.78 | 40.6 | 62.9 | 51.2 | 37.5 | 60.5 | 0 | 62.2 | 95.1 | 79.5 |
| May | 3.59 | 3.81 | 48 | 65.9 | 57.1 | 47 | 70.9 | 0 | 64.5 | 95.7 | 77.6 |
| June | 4.27 | 3.86 | 61.6 | 79.1 | 69.7 | 56.1 | 80 | 0 | 63.9 | 95 | 80.9 |
| July | 3.48 | 3.84 | 57.7 | 79.9 | 69.3 | 58.8 | 83.2 | 0 | 56.3 | 95.2 | 76.1 |
| August | 0.07 | 3.59 | 58 | 81.6 | 69.7 | 81.7 | 81.7 | 0 | 60 | 98.5 | 81.2 |
| Sept | 4.82 | 3.2 | 41.2 | 73.6 | 57.4 | 51.9 | 75.8 | 0 | 69.8 | 99.5 | 87.7 |
| Oct | 0.38 | 0 | 39.8 | 57.2 | 61.9 | 0 | 0 | 0 | 70.3 | 99.3 | 86.5 |

ACKNOWLEDGEMENT

The 1996 Lettuce cultivar trial was sponsored by the Ohio Vegetable and Small Fruit Research Check-off program.

Table 1. Lettuce Cultivar Evaluation Trials, 1996

| Variety | Source | Wt/head (kg) | Avg. wt. 24 crate (lb) | Color: 5 = dark 1 = light | Comments |
|------------------|----------|-----------------|------------------------------|---------------------------------|---|
| BOSTON | | | | | |
| Senaria | Enza | 6.68 | 34.04 | 2 | Very uniform, very loose head, a lot of outside leaves, some seeders, leaves seem curly, rep 2 heads are firm. |
| Focus* | Enza | 6.54 | 37.32 | 1 | Burn on head, a lot of leaves starting to push seeders, may have been ready earlier, upright growth, heads very firm. |
| Escort | Enza | 6.16 | 29.31 | 4.5 | Very firm, burn in heads, pushing seeders, may have been ready earlier, rep 2 medium firmness, no seeders. |
| Opera* | Enza | 6.46 | 35.87 | 3 | Going to seed, very uniform, burn in head, medium firmness of head. |
| Thirza* | Enza | 4.72 | 29.74 | 3 | A lot of leaves, solid heads, firm, very uniform, rep 2 less trim. |
| Prosper | Enza | 4.96 | 32.09 | 2 | Some seeders, very firm, a lot of leaves, medium height, rep 2 medium firmness. |
| Felicia | Enza | 6.18 | 32.17 | 2 | Very uniform, heads are solid, rep 2 color is 3. |
| Ovation | Enza | 6.32 | 31.80 | 1 | Very firm, some burn in heads, low growing. |
| Ermosa | Johnny's | 5.30 | 29.37 | 5 | Not many leaves, very dark, very firm, very little burn, uniform, rep 2 very uniform. |
| Margarita MT | Rispens | 6.26 | 31.32 | 4 | Not very uniform, some heads are small, some large, heads are loose, a lot of outside leaves. |
| Big Hoss MI | Rispens | 5.12 | 31.03 | 3 | Big head, some burn, spongy, a lot of leaves, not very firm, rep 2 firm and uniform. |
| Optima SPTK "D" | Vilmorin | 6.32 | 34.57 | 4 | Going to seed, medium firmness, very uniform, burn, very upright. |
| Optima | Siegers | 6.36 | 35.92 | 4 | Very uniform, tall upright, very solid heads, burn in heads. |
| Optima SPTK "D"G | Vilmorin | 6.56 | 36.48 | | |
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Table 1. Lettuce Cultivar Evaluation Trials, 1996

| Variety | Source | Wt/head (kg) | Avg. wt. 24 crate (lb) | Color: 5 = dark 1 = light | Comments |
|-----------------------|----------|-----------------|------------------------------|---------------------------------|--|
| ROMAINE | | | | | |
| Hector | Enza | 5.64 | 2490 | 1 | Grows upright, burn, very plain, shiny, yellow leaf, seeders, no future, 12" high. |
| Manavert | Enza | 4.90 | 24.90 | 4 | Short, seeders, grows open, dull color, very uniform, 10", rep 2, 10" high. |
| XP 5491 | Asgrow | 4.26 | 24.37 | 3 | Dusty dull green, open rows, very uniform, 11 inches. |
| XP5491-G | Asgrow | 4.76 | 26.67 | | |
| XP5797 | Asgrow | 3.86 | 23.05 | 3 | Very short, grows pointed, very uniform, seeders, 10" high. |
| Grand Teton | Asgrow | 3.56 | 26.62 | 2.5 | Not very uniform, shiny green, grows very open, 12" high. |
| Ideal Cos* | Asgrow | 5.02 | 33.52 | 3 | Very uniform, shiny green, 14 inches high. |
| Corsair | Johnny's | 6.00 | 28.78 | 3 | Grow very open, not very uniform, curly leaf, 11 inches high. |
| Green Towers* | Rispens | 4.62 | 24.87 | 3 | Grows open, very uniform, grows very open, 15 inches high. |
| Darkland Cos El (MI)* | Rispens | 5.20 | 24.05 | 4 | Very short, grows open, very uniform, 10 inches high. |
| Frontier Cos (MI) | Rispens | 4.62 | 22.97 | 3.5 | Grows very open, not very uniform, 10 inches high. |
| Green Towers | Rispens | 8.4 | 42.74 | | 15 inches high |
| Corsair | Johnny's | 9.16 | 44.75 | | 13 inches high |
| Ideal Cos | Asgrow | 8.28 | 49.93 | | 15 inches high |

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|--------------------|-------------|-----------------|------------------------------|---------------------------------|--|
| GREEN LEAF | | | | | |
| XPI2027 | Asgrow | 4.24 | 20.33 | 3 | Very small, very uniform, curly leaves, burn in center. |
| Tiara* | Asgrow | 6.58 | 32.51 | 3 | Not very uniform, some gaps, flat leaf, lot of leaves, upright growth, dull green, rep 2 very uniform. |
| Glossy Green | Asgrow | 7.04 | 31.03 | 5 | All going to seed, no future. |
| XPI2008 (Luzon) | Asgrow | 4.5 | 26.49 | 1 | Oak leaf type lettuce. |
| | | | | | |
| Green Vision | Rispens | 5.26 | 28.84 | 4 | Light centers, very small, no future. |
| Crisp & Green | Rispens | 5.42 | 29.42 | 3 | Light centers, very upright, very curly, burn. |
| RS3127* | Royal Sluis | 6.40 | 38.25 | 5 | Leaves very curly, very upright growth, very positive future, bright color, looks full. |
| PS64289 | Siegers | 5.96 | 26.06 | 4 | Burn, not very uniform, very upright, medium growth. |
| | | | | | |
| RED LEAF | | | | | |
| Summer Red | Enza | 5.08 | 25.85 | | Light red, more green, very shiny, very curly, future questionable. |
| Redina | Enza | 2.12 | 10.81 | | Very dark red & shiny, 100% seeders, May look at for a spring crop, color nice. |
| Rolina ez | Enza | 3.40 | 17.92 | | |
| Rolina G | Enza | 3.66 | 19.96 | | |
| Cabernet Red | Asgrow | 2.80 | 16.15 | | Light, dull seeders, more green, oakleaf type. |
| Cardinale(602)sptk | Vilmorin | 3.10 | 24.93 | | Dull dark red, dirty color, all going to seed. |
| Rolina* | Enza | 3.62 | 18.26 | | Very bright & shiny red, attractive color, very uniform, no seeders. |
| Red Price MT | Ferry-Morse | 4.52 | 24.61 | | Light red, more green, shiny, upright, going to seed. |
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| ESCAROLE | | | | | |
| Nutrobel | Enza | 6.68 | 32.93 | 5 | Very full heads, hardly any burn, not very uniform, some burn on leaves and centers. |
| Coral | Johnny's | 5.86 | 27.44 | 3 | Smaller heads than previous, uniform, lot of burn on leaves, burn on leaves and centers. |
| Elisa& | Rispens | 5.54 | 32.06 | 5 | Very full heads, some burn on tips, very uniform, a little burn. |
| Vivat | Bejo | 3.66 | 26.62 | 5 | Color cull, but dark, burn on tips and centers. |
| Limnos | Bejo | 3.76 | 30.56 | 3 | Burn leaves, tips and center, not very uniform, no future. |
| Eros | Bejo | 5.00 | 32.35 | 2.5 | Very small, compact, grows upright, not uniform, very little burn, rep 2, very uniform. |
| Elisa | Ferry-Morse | 5.28 | 24.66 | 5 | Very full heads, some burn on leaves, very little burn, good amount of burn on leaves, more in center. |
| Elisa (G) | Ferry-Morse | 5.72 | 26.75 | | Some burn on tips, very little burn, some burn on leaves. |
| ENDIVE | | | | | |
| Markant | Enza | 5.36 | 26.11 | 5 | Burn on leaves, a good amount of burn of leaves, no burn, good big top, uniform, some burn on tips. |
| Neos | Johnny's | 4.10 | 23.97 | 3 | Burn on tips, burn on leaves, small heads, not uniform. |
| Wallonne-Tasos* | Bejo | 5.14 | 30.56 | 5 | Some burn on tips, some burn in head and leaves, very large. |

Seeded: May 9, 1996

Transplanted: June 12, 1996

Harvested: Boston, Green & Red leaf and Romain: July 17; Endive, Escarole: July 22

Plant Spacing: 20" between rows; 9" between plants

Plots: 3 rows, 20 feetlong, 4 replications

*Considered best in type.

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